



# IMPACT OF DEMOGRAPHIC FACTORS ON SHARED LEADERSHIP

Alka Agnihotri<sup>1</sup> | Dr. Shikha Kapoor<sup>2</sup>

<sup>1</sup> Research Scholar, AIBS , Amity University, Noida.

<sup>2</sup> Professor and Area Chairperson HR& OB.

## ABSTRACT

**Purpose:** To explore how the demographic factors impact the dimensions / determinant of shared leadership in IT teams and what IT companies can do to construct better teams in the light of these findings in terms of better shared leadership promotion and execution. **Design/methodology/approach:** This study takes inputs from secondary data for extracting the dimensions / determinants of Shared Leadership to be undertaken for study. The dimensions extracted from literature review were complex job demands, multidisciplinary team, Interactions and deliberations, Self leadership, Super leadership, Coexistence of shared leadership with formal leadership. On the other hand it depends on inputs from primary data for delineating impact of demographic factors on shared leadership. Thus the study basically focuses on the impact and interaction of demographic factors and some of the important dimensions of Shared leadership using one way anova technique. **Findings:** The study brings to light how the different demographic factors impact the different dimensions of shared leadership and also how companies can manage the demographic factors by selecting the team members with right demographic profile which may help successful working through shared leadership. **Research Limitations and Implications:** The Research is focussed at the team level and the responses of team members were incorporated in the investigations. The number of demographic factors and the dimensions of shared leadership undertaken for study were limited in number and scope. **Practical implications:** Conceptualization of impact of demographic factors on dimensions of shared leadership can go a long way in helping the decision makers to incorporate team members from right demographic categories. Some demographic factors support shared leadership and its dimensions whereas other demographic factors may not. **Originality /Value:** Interaction between demographic factors and the dimensions of shared leadership influences the shared leadership's functioning.

**KEYWORDS:** Shared leadership, Multidisciplinary teams, Demographic Factors, Dimensions, Determinants, impact.

## Introduction:

A comprehensive and self explanatory definition of shared leadership comes from scholar duo Pearce and Conger (2003). They have put shared leadership as, "A dynamic, interactive process among individuals in groups for which the objective is to lead one another to the achievement of group or organisational goals or both". Shared leadership is seen by scholars as to have evolved as very compatible leadership style with respect to working by a multidisciplinary team in dynamic, fast changing, quick response demanding, knowledge intensive work situations. In these work situations the task involves cross functional inputs which makes single person incapable of providing leadership to the whole process, rather what becomes more feasible is that each team member may lead the team as and when the job situation demands. Members have interdependence on each other for the completion of the work and they are also empowered to take decisions in relation to their expertise. Leadership has evolved into several variants keeping pace with demands and challenges it faced. Transformational leadership, transactional leadership, participative leadership, servant leadership, communicative leadership, situational leadership, delegated leadership, autocratic leadership, democratic leadership, Laissez-faire. The Traditional Theories of leadership led to the Nature - Nurture debate. The Iowa Leadership studies, The Ohio State Leadership Studies and Early Michigan Studies, Fielder's Contingency model, etc focussed on the contingencies of a leader. Under the traditional theorist came the Path – Goal theorists. The path – goal theory derived from the theory of motivation. It bases itself on leader's ability to impact to motivation and performance. Thus leadership is one of the most researched concept of management. The Modern Theory of leadership came up with other alternative theories of leadership ranging from charismatic, transformational, substitutive and authentic, etc. Shared leadership is one such variant. It happens at team level in a dynamic, fast changing and quick response demanding situations. It involves multifunctional teams comprising of experts from varied fields. Their work is interdependent in nature. Each team member depends on other member for work completion. The concept of shared leadership has been mostly explored in education and medical fields. Exploring it in the IT sector in Indian context is a new endeavour. The demographic factors like age, qualification, experience, income and gender of the people may put an impact on the dimensions of shared leadership individually and also comprehensively taking shared leadership on the whole. Studies relating demographic factors and Shared leadership are scanty. Some of the demographic factors may support this leadership style, some may be neutral and others may put an adverse impact. The controlling of demographic factors is in the hands of the companies at the level of recruitment and selection so if companies, who have institutionalised arrangements for shared leadership in their working, get an insight of how demographic factors work on Shared leadership , they can use a control measure on these demographic factors while member selection for creating the multifunctional teams to work through shared leadership. This research paper tries to explore the aspect of Shared leadership that how and to what extent the demographic variables put an impact on it. This study aims to explore the role of the demographic factors like gender, age,

qualification, income, experience, etc in putting an impact on determinants / dimensions of shared leadership and also on the shared leadership as the whole in the different Indian IT sector companies.

## Literature Review :

Efforts to understand leadership has been since time immemorial. Gibbs (1954) gave a typology of leadership as distributed and focussed. Focussed leadership involves a single leader and a vertical, top-down arrangement of functioning, whereas the distributed leadership involves distribution of leadership roles amongst the participants. The decision making and responsibility are also distributed. Another set of writer including Bling, Pearce and Kohles (2006) believed that Shared leadership is a leadership practice which involves multiple individuals and not just those at the top in organisational hierarchy or those in formal leadership roles. They also put it as a team -level phenomenon. Shared leadership has also been described as a better alternative in an increasingly complex world by O'Toole et al (2004) , Pearce (2004), Waldersee and Eagleson (2002) , who believed that broader profiles at the top are required when the companies are dealing with very complex technologies . They further clarify that when complex technologies are involved , it becomes difficult to communicate between the technical and non technical participants of shared leadership . Thus In shared leadership stress is put a lot on formal non formal interactions and deliberations so that team members understand what to do and how to do . We can look at shared leadership as a relay race where instead of a baton , the work portion passes from one runner (expert) to the other and on their turn each has to take the responsibility of work and they all collectively try to achieve the goal of completing the race(goal) . Further Pearce and Conger (2003) elaborate it as leadership which is distributed amongst participant individuals. It is not centralised in the single individual . According to Carson et al (2007) the team environment acts as a facilitator in which dimensions like shared purpose, social support and voice play important role. In shared leadership there are cross functional teams where each expert shares the responsibility for work, they help each other to reach the goal and are empowered to take decisions in the area of their expertise .

## Research Question:

This study deals with Shared leadership, its some dimensions or determinants and demographic variables of the respondents. After undergoing a thorough literature review following research questions were formulated to assess the role of demographic variables with respect to the dimensions/ determinants of shared leadership.

Is there a significant difference in the determinants / dimensions of shared leadership between the demographic groups : age, years of experience, income, gender and qualification of team members under study?

What roles the demographic factors play in relation to Shared leadership on the whole?

**Objectives for the Study:**

The basic objective is to explore and understand if there exists significant difference in the determinants of shared leadership based on the demographic variables like age, years of experience, income, gender, qualification of the team members under study. The study also aims to explore how the demographic profiles impact the shared leadership on the whole.

**Research Hypotheses:**

**H01:** There is no significant impact on the dimensions of shared leadership with different age groups of team members.

**H02:** There is no significant impact on the dimensions of shared leadership with different years of experience of team members.

**H03:** There is no significant impact on the dimensions of shared leadership with different Income groups of team members.

**H04:** There is no significant impact on the dimensions of shared leadership with different gender of team members.

**H05:** There is no significant impact on the dimensions of shared leadership with different qualifications of team members.

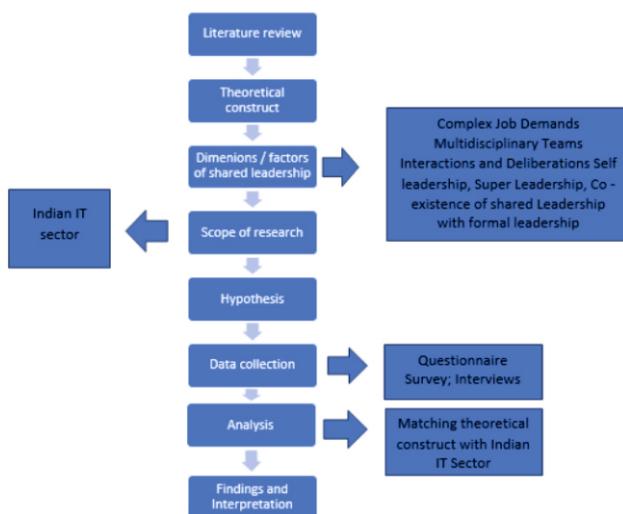
Each of the hypotheses can be divided into sub hypotheses in terms of six determinants / dimensions of shared leadership undertaken for study namely Complex Job Demands, Multidisciplinary teams, Interaction and Deliberations, Self Leadership, Super Leadership and Coexistence of Shared Leadership with Formal Leadership.

**Justification of the Study:**

Many researches have been undertaken on relationship of shared leadership on variety of issues like performance, efficiency, motivation, culture, etc but there are just limited study on role of demographic profile on the some of the determinants of shared leadership undertaken for study individually and on shared leadership on the whole.

**Research Methodology:**

The research variables were derived from in-depth literature review. The quantitative data collection of research study was done by a survey questionnaire. A thorough and in depth study was undertaken and important determinants / dimensions of shared leadership were listed. Study of works and articles of Craig L Pearce et al, have brought to light several facets of Shared Leadership, its importance and relevance. Several articles like 'The importance of self and shared leadership in team based knowledge work'; 'Determinants of Shared leadership' (Shane Woods, 2005), etc, were studied to find some the determinants / dimensions of shared leadership. Around these dimensions/ determinants questionnaire was developed (Fig1). Its content validity was ensured through sending it to experts on the subject and discussing it with some senior team managers. A pilot was also done in an Indian IT company using the Questionnaire. Questionnaire's Cronbach alpha was calculated using SPSS and came out to be. 724 which implies that the questionnaire is reliable. The respondents for the study were all team members working in IT sector companies to whom questionnaire was either emailed or personally distributed in hardcopy. Since at the team level, the team size is small in IT organisations, so the responses from each IT company was also small, mostly ranging from 2 to 7. Data was collected from 74 IT companies which include MNCs working in India and also local Indian IT companies. Responses to more than 222 questionnaires were obtained.

**Fig 1: Research Flow model****Descriptive statistics of respondents :**

Data was collected related to demographic variables like age, qualification, experience, and income.

The demographic factors undertaken for study were the gender, age, experience, income and qualification of the team members. Under the gender category male and female both were taken as respondents. In this study, 156 males and 46 females were involved, 20 respondents information regarding gender was missing (Table 1). The Age data was collected under five groups i.e. 20-25 years, 25.1-35 years, 35.1 – 45 years, 45.1-55 years and 55.1-65 years. Most respondent belonged to 25-35 years (39.6%) (Table 2). Thus most teams in IT sector have young team members between 20 to 35 years. The demographic variable income was undertaken for study under five heads on yearly basis i.e. Below 2 lakhs, 2 lakhs to 5 lakhs, 5 lakhs to 10 lakhs, 10 lakhs to 20 lakhs and above 20 lakhs (Table 3). About 64% of respondents fall between 2 lakhs to 20 lakhs category income group. The Qualifications of respondent belonged to graduates, post graduates and PhDs. Mostly respondents belonged to graduate category (Table 4).

**Table1:**

Gender					
	Frequency	Percent	Valid Percent	Cumulative Percent	
Valid	1	156	70.3	77.2	77.2
	2	46	20.7	22.8	100.0
Total		202	91.0		
Missing	System	20	9.0		
Total		222	100.0		

[gender code used "1" for male; "2" for female]

**Table 2**

Age group					
	Frequency	Percent	Valid Percent	Cumulative Percent	
Valid	20 to 25	31	14.0	16.4	16.4
	25.1 to 35	88	39.6	46.6	63.0
	35.1 to 45	65	29.3	34.4	97.4
	45.1 to 55	5	2.3	2.6	100.0
Total		189	85.1		
Missing	System	33	14.9		
Total		222	100.0		

**Table 3**

Income in rupees per annum					
	Frequency	Percent	Valid Percent	Cumulative Percent	
Valid	below 2 lakh	6	2.7	3.2	3.2
	2 to 5 lakh	47	21.2	25.3	28.5
	5 lakh to 10 lakh	47	21.2	25.3	53.8
	10 lakh to 20 lakh	49	22.1	26.3	80.1
	above 20 lakh	37	16.7	19.9	100.0
Total		186	83.8		
Missing	System	36	16.2		
Total		222	100.0		

Qualification code					
	Frequency	Percent	Valid Percent	Cumulative Percent	
Valid	1	106	47.7	55.2	55.2
	2	85	38.3	44.3	99.5
	3	1	.5	.5	100.0
Total		192	86.5		
Missing	System	30	13.5		
Total		222	100.0		

[The qualification codes used were "1" for Graduate, "2" for Post Graduate and "3" for Ph.D.]

**Data Analysis:**

**The Dependent Variables:** The dimensions of shared leadership and the shared leadership on the whole were studied. These dimensions were arrived at analysing the most cited and widely understood definitions of the concept of shared leadership and the conditions favouring it. The dimensions of shared leadership undertaken for this study included Complex job demands, Multidisciplinary team, Interaction and deliberations, Self leadership, Super leadership, Coexistence of shared leadership with formal leadership

**The Independent Variables:** The demographic factors namely like age, experience, income, qualification and gender of the team members undertaken for study were treated as independent variable.

The analysis of the collected data was done through SPSS and the technique was One way Anova technique. Under this technique all the dimensions of shared leadership were put into the dependent list at a time but the demographic factors like age, experience, income, qualification and gender were put into factor place one by one. The impact of the demographic factors in influencing/impacting the dimensions of shared leadership in the teams working in IT sector was studied through the different output tables thus obtained.

**Interpretation :**

The research on 222 team members from about 70 companies showed that there is no significant difference between impacts on the dimensions of shared leadership undertaken for study like complex job demands, multidisciplinary team, interaction and deliberations, self leadership, super leadership, coexistence of shared leadership with formal leadership with different age groups of team members (*p value more than 0.05 at significance level of .05. Refer Table 5*). In other words, the dimensions of shared leadership like complex job, multidisciplinary team, interaction and deliberation, self leadership, super leadership, coexistence of shared leadership with formal leadership are not impacted by the treatment

variable age groups to which the team members may belong. Since these dimensions are not influenced so Shared leadership also on the whole is not impacted because these dimensions are the constituents of Shared leadership.

Table 5

[DataSet1] C:\Program Files (x86)\SPSS Evaluation\Dimensional analysis shared leadership first.sav

ANOVA					
	Sum of Squares	df	Mean Square	F	Sig.
complex job	4.049	3	1.350	1.774	.154
Between Groups	138.471	182	.761		
Total	142.520	185			
Multidisciplinary team	1.442	3	.481	1.582	.195
Between Groups	55.295	182	.304		
Total	56.737	185			
Interaction and Deliberation	.390	3	.130	.265	.851
Between Groups	89.047	181	.492		
Total	89.437	184			
Self Leadership	1.000	3	.333	.853	.466
Between Groups	71.090	182	.391		
Total	72.090	185			
Super Leadership	3.902	3	1.301	2.624	.052
Between Groups	90.723	183	.496		
Total	94.625	186			
Coexistence of shared leadership with formal leadership	1.995	3	.665	1.422	.238
Between Groups	86.532	185	.468		
Total	88.526	188			

The data collected in relation to the duration of experience of the team members showed that the duration of experience has impact on complex job demands and super leadership dimensions of shared leadership in the different IT sector companies in India (**The p - value is less than .05 at 5% significance level. Refer Table 6**). Further the output also showed that duration of experience has no impact on multidisciplinary teams, interaction and deliberations, self leadership and the coexistence of shared leadership with formal leadership dimensions of shared leadership in the different IT sector companies in India. Thus we can conclude that the treatment variable experience has partial impact on shared leadership as it puts an impact on complex job demands and super leadership dimensions but no significant impact on multidisciplinary teams, interaction and deliberations, self leadership and the coexistence of shared leadership with formal leadership dimensions of shared leadership.

Table 6

[DataSet1] C:\Program Files (x86)\SPSS Evaluation\Dimensional analysis shared leadership first.sav

ANOVA					
	Sum of Squares	df	Mean Square	F	Sig.
complex job	68.700	39	1.762	3.470	.000
Between Groups	74.631	147	.508		
Total	143.331	186			
Multidisciplinary team	12.570	39	.322	1.101	.334
Between Groups	43.046	147	.293		
Total	55.616	186			
Interaction and Deliberation	22.934	39	.588	1.244	.179
Between Groups	69.017	146	.473		
Total	91.952	185			
Self Leadership	15.705	39	.403	.961	.541
Between Groups	61.572	147	.419		
Total	77.277	186			
Super Leadership	26.689	39	.684	1.452	.059
Between Groups	69.745	148	.471		
Total	96.434	187			
Coexistence of shared leadership with formal leadership	22.784	39	.584	1.260	.165
Between Groups	69.558	150	.464		
Total	92.342	189			

Similarly analyzing the impact of the demographic factor income, (**Table 7**), the dimensions like complex job demands and the interaction and deliberations were significantly impacted by the demographic variable income in the different Indian IT sector companies. On the other hand, dimensions like the multidisciplinary teams, self leadership, super leadership and the coexistence of shared leadership with formal leadership were not significantly impacted. Thus we can conclude that the treatment variable Income has partial impact on shared leadership as it puts an impact only on complex job demands and interaction and deliberations dimensions.

Table 7

[DataSet1] C:\Program Files (x86)\SPSS Evaluation\Dimensional analysis shared leadership first.sav

ANOVA					
	Sum of Squares	df	Mean Square	F	Sig.
complex job	16.603	4	4.151	5.909	.000
Between Groups	125.027	178	.702		
Total	141.629	182			
Multidisciplinary team	1.804	4	.451	1.480	.210
Between Groups	54.245	178	.305		
Total	56.050	182			
Interaction and Deliberation	5.058	4	1.265	2.754	.030
Between Groups	81.267	177	.459		
Total	86.326	181			
Self Leadership	1.470	4	.367	.954	.434
Between Groups	68.534	178	.385		
Total	70.004	182			
Super Leadership	1.517	4	.379	.734	.570
Between Groups	92.458	179	.517		
Total	93.974	183			
Coexistence of shared leadership with formal leadership	.839	4	.210	.435	.784
Between Groups	87.356	181	.483		
Total	88.195	185			

The demographic variable qualification significantly impacts the dimension of complex job demands, multidisciplinary teams, interaction and deliberations and super leadership dimensions (**p<.05 at 5% significance level, Table 8**). But it does not impact the dimensions of self leadership and the coexistence of shared leadership with formal leadership (**p > .05, at 5% significance level, Table 8**). Thus qualification has no impact on self leadership and the coexistence of shared leadership with formal leadership dimension of shared leadership in different IT sector companies. We can conclude that the treatment variable qualification has a partial impact on shared leadership as it puts an impact on the dimensions complex job demands, multidisciplinary teams, interaction and deliberations and super leadership.

Table 8

[DataSet1] C:\Program Files (x86)\SPSS Evaluation\Dimensional analysis shared leadership first.sav

ANOVA					
	Sum of Squares	df	Mean Square	F	Sig.
complex job	6.745	3	2.248	3.026	.031
Between Groups	137.441	185	.743		
Total	144.186	188			
Multidisciplinary team	3.384	3	1.128	3.919	.010
Between Groups	53.242	185	.288		
Total	56.626	188			
Interaction and Deliberation	3.698	3	1.233	2.604	.053
Between Groups	87.111	184	.473		
Total	90.810	187			
Self Leadership	2.178	3	.726	1.777	.153
Between Groups	75.581	185	.409		
Total	77.759	188			
Super Leadership	4.585	3	1.528	2.999	.032
Between Groups	94.798	186	.510		
Total	99.382	189			
Coexistence of shared leadership with formal leadership	3.702	3	1.234	2.517	.060
Between Groups	92.165	188	.490		
Total	95.867	191			

The one way Anova analysis of data collected on gender of the team members showed that its impact was significant on the dimensional variable undertaken for study. It implies that there is no significant impact on the dimensions of shared leadership like complex job, multidisciplinary team, Interaction and deliberation, self leadership dimension, super leadership dimension and coexistence of shared leadership with formal leadership dimension with different gender of team members (**p > .05 at 5% significance level .Refer Table 9**). Since these dimensions are not influenced so Shared leadership also on the whole is not impacted because these dimensions are the constituents of leadership.

Table 9

[DataSet1] C:\Program Files (x86)\SPSS Evaluation\Dimensional analysis shared leadership first.sav

ANOVA					
	Sum of Squares	df	Mean Square	F	Sig.
complex job	1.579	1	1.579	2.130	.146
Between Groups	146.075	197	.741		
Total	147.655	198			
Multidisciplinary team	.380	1	.380	1.274	.260
Between Groups	58.822	197	.299		
Total	59.203	198			
Interaction and Deliberation	.000	1	.000	.000	.992
Between Groups	98.055	196	.500		
Total	98.055	197			
Self Leadership	.000	1	.000	.000	.994
Between Groups	83.155	197	.422		
Total	83.155	198			
Super Leadership	.460	1	.460	.872	.351
Between Groups	104.402	198	.527		
Total	104.862	199			
Coexistence of shared leadership with formal leadership	.139	1	.139	.277	.599
Between Groups	100.542	200	.503		
Total	100.681	201			

#### Discussion of Findings :

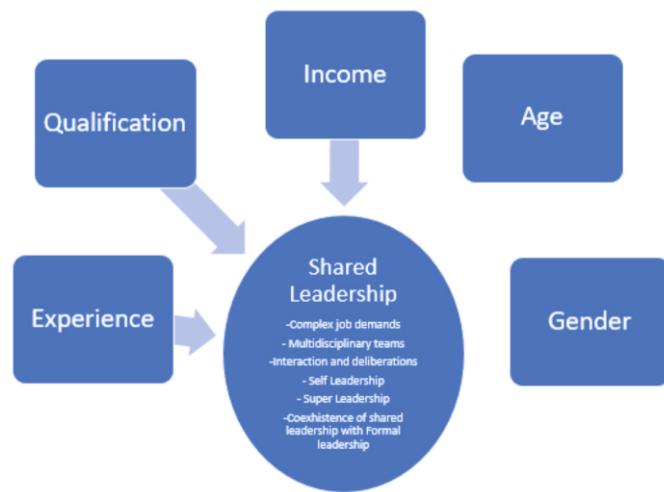
Thus the One Way Anova Analysis shows that Age has no impact on dimensions of shared leadership. Experience has significant impact on complex job demands and super leadership but on other dimensions it has no significant impact. Income has significant impact on complex job demands and on Interaction and deliberation but on other dimensions it has no significant impact. Qualification has significant impact on complex job demands, multidisciplinary teams, interaction and deliberations and super leadership dimensions but not on self leadership and the coexistence of shared leadership with formal leadership dimension of shared leadership. Gender has no significant impact on complex job demands, multidisciplinary team, interaction and deliberation, self leadership, super leadership coexistence of shared leadership with formal leadership. (**Table 10**)

Table 10

Demographic factors →	AGE	experience	income	Qualification	gender
Dimensions of shared leadership ↓					
Complex job demand	No Impact	Impact	Impact	Impact	No Impact
Multidisciplinary team	No Impact	No Impact	No Impact	Impact	No Impact
Interaction and Deliberation	No Impact	No Impact	Impact	Impact	No Impact
Self leadership	No Impact	No Impact	No Impact	No Impact	No Impact
Superleadership	No Impact	Impact	No Impact	Impact	No Impact
Coexistence of shared leadership with formal leadership	No Impact	No Impact	No Impact	No Impact	No Impact
Overall Shared leadership	No Impact	Partial Impact	Partial Impact	Partial impact	No Impact

**Implications of findings:**

The study shows that age groups of team member and their gender have no role in shared leadership. Thus team comprising of members from any age group and any gender may be constituted. But qualification, income and experience do impact shared leadership process. Thus these demographic variables need to be considered while teams are being constituted for working through shared leadership. (Fig 2)

**Fig 2 : Model of relation between Demographic Variables and Shared leadership:****Conclusions and Recommendation:**

The study shows that the demographic factors like age and gender have no significant impact on shared leadership as there is no significant difference on the dimensions of shared leadership with the different age and gender groups. But the demographic factors like experience, qualification and income do show impact on the dimensions of shared leadership as there is significant difference on the dimensions of shared leadership with the different experience, qualification and income .It is therefore suggested that while building the team for working through shared leadership the demographic variables like age and gender of the team members may be ignored as these factors do not impact the shared leadership but other demographic variables like experience, qualification and income do put an impact on the shared leadership so they should be carefully considered.

**Limitations :**

The study takes limited aspects and dimensions of shared leadership for the analysis . Future studies may explore other aspects and dimensions of shared leadership. The study undertakes limited number of the demographic factors for its consideration, future studies may undertake more number of them.

**REFERENCES:**

1. Bradford, D.L., and Cohen, A.R (2008) Power up: Transforming Organisations Through Shared Leadership. New York: John Wiley & Sons
2. Bligh M.L., Pearce, C.L, Kohles, J.C.(2006) "The importance of self- and shared leadership in team based knowledge work: A meso-level model of leadership dynamics", Journal of Managerial Psychology, 21 (4), 296-318
3. Carson,J.B.,et.al.(2007).Shared Leadership in Teams: An Investigation of the Antecedent conditions and Performance, Academy of Management Journal,50(5), 1217-1234
4. Carte, T. A., Chidambaram, L., & Becker, A. (2006). Emergent Leadership in Self-Managed Virtual Teams: A Longitudinal Study of Concentrated and Shared Leadership Behaviors. Group Decision and Negotiation, 15(4), 323-343
5. Gibb, C. A. 1954. Leadership. In G. Lindzey (Ed.), Handbook of social psychology, vol. 2: 877-917. Reading, MA: Addison-Wesley.
6. Kocolowski, M. D. (2010). Shared Leadership: Is It Time for a Change?, Emerging Leadership Journeys, 3(1), 22-32
7. O'Toole, J., Galbraith, J., & Lawler III, E. E. (2003). The promise and pitfalls of shared leadership: When two (or more) heads are better than one. In C. L. Pearce & J. A. Conger, (Eds), Shared leadership: Reframing the hows and whys of leadership (pp. 250-267). London: Sage.
8. Pearce, C. L. (2004). The future of leadership: Combining vertical and shared leadership to Transform knowledge work. Academy of Management Executive, 18(1), 47-57.
9. Pearce, C. L., & Conger, J. A. (2003). All those years ago: The historical underpinnings of shared leadership. In C. L. Pearce & J. A. Conger (Eds), Shared leadership: Reframing the hows and whys of leadership (pp. 1-18). London: Sage.
10. Waldersee, R., & Eagleton, G. (2002). Shared leadership in the implementation of reorientations. Leadership & Organization Development Journal, 23(7), 400-407
11. Wood, M. S. (2005). Determinants of shared leadership in management teams. International Journal of Leadership Studies, 1(1), 64-85.